ABSTRACT NUMBER: 2875

Effects of Filgotinib on Anemia, Thrombocytopenia and Leukopenia: Results from a Phase 3 Study in Patients with Active Rheumatoid Arthritis and Prior Inadequate Response or Intolerance to Biological DMARDs

Mark Genovese[1], Kenneth Kalunian [2], Jacques-Eric Gottenberg [3], Beatrix Bartok [4], YingMeei Tan [4], Ying Guo [4], Chantal Tasset [5], John Sundy [4], Kurt de Vlam [6], David Walker [7] and Tsutomu Takeuchi [8], [1]Stanford University, Stanford, CA, [2]Division of Rheumatology, Allergy, and Immunology, University of California San Diego, La Jolla, CA, [3]Department of Rheumatology, Strasbourg University Hospital, Strasbourg, France, [4]Gilead Sciences, Inc., Foster City, CA, [5]Galapagos NV, Mechelen, Belgium, [6]Department of Rheumatology, Universitair Ziekenhuis Leuven, Leuven, Belgium, [7]Northumbria Healthcare, Northumbria, United Kingdom, [8]Keio University School of Medicine, Tokyo, Japan

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SESSION INFORMATION

Date: Wednesday, November 13, 2019

Session Type: ACR Abstract Session

Session Title: 6W011: RA – Diagnosis, Manifestations, & Outcomes V: Treatment (2870–2875)

Session Time: 9:00AM-10:30AM

Background/Purpose: Anemia, thrombocytopenia and leukopenia in RA patients treated with non-Janus Kinase 1 (JAK1) selective inhibitors may be due to inhibition of hematopoietic growth factors signaling through JAK2. Therefore, we investigated the extent of anemia, thrombocytopenia and leukopenia in patients with active RA with a prior inadequate response/intolerance to biological DMARD (bDMARD) treated with filgotinib (FIL), a novel and selective JAK1 inhibitor, during a Phase 3, 24-week trial (FINCH-2; NCT02873936).

Methods: In the randomized, double-blind, placebo-controlled Phase 3 FINCH-2 trial, patients were randomized 1:1:1 to receive oral FIL 200 mg, 100 mg, or placebo (PBO) once daily for 24 weeks in addition to conventional synthetic DMARDs. We assessed shifts from baseline at 12 and 24 weeks in hemoglobin, platelets, neutrophils and lymphocytes in FINCH-2 patients, assessed by baseline values as normal, mild-moderate and severe for these variables.

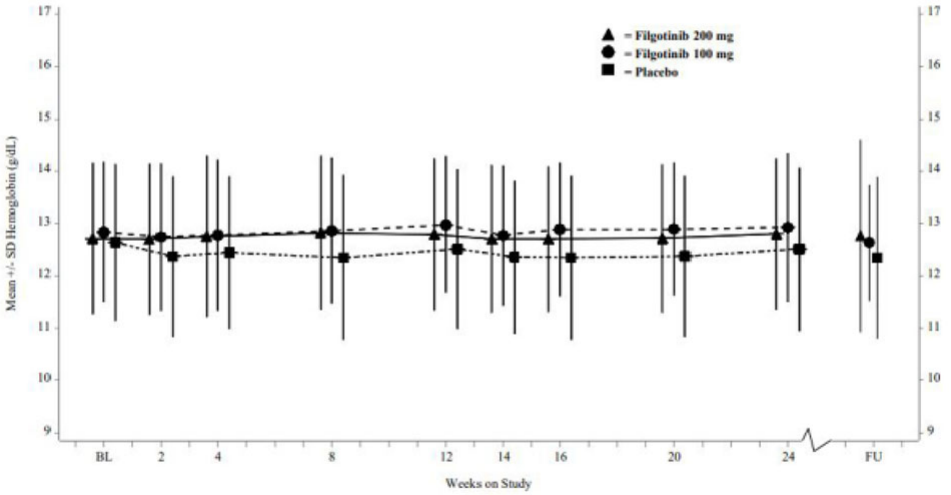
Results: A total of 448 patients were enrolled and treated, FIL 200 mg, n = 147; FIL 100 mg, n = 153; PBO, n = 148. Overall, hemoglobin levels, platelet, lymphocyte and neutrophil counts remained consistent throughout the study (Figure). At baseline, 129 (28.8%), 4 (0.9%), 10 (2.2%) and 26 (5.8%) patients had mild-moderate low levels of hemoglobin, platelet, neutrophil and lymphocyte, respectively, and 5 (1.1%) had severely low levels of lymphocytes. Of the patients with mild-moderate hemoglobin levels at baseline, 13.1% with FIL 200 mg, 9.5% with FIL 100 mg, and 7.6% with PBO achieved normal hemoglobin at Week 24, respectively (Table). Of those with normal baseline hemoglobin levels, only 6.0–9.8% had mild low levels at Week 24. All patients with baseline mild-moderate low platelets and neutrophils had normal levels at Week 24, except for one patient with

mild neutropenia receiving FIL 100 mg. Of the patients with normal platelet and neutrophil levels at baseline, >94% maintained these at Week 24 in all treatment groups. By Week 24, 3.2%, -5.2% and 2.2% of patients treated with FIL 200 mg, FIL 100 mg and PBO, respectively in the mild-moderate subgroup and 1.7% in the severe subgroup treated with FIL 100 mg had normal lymphocyte counts.

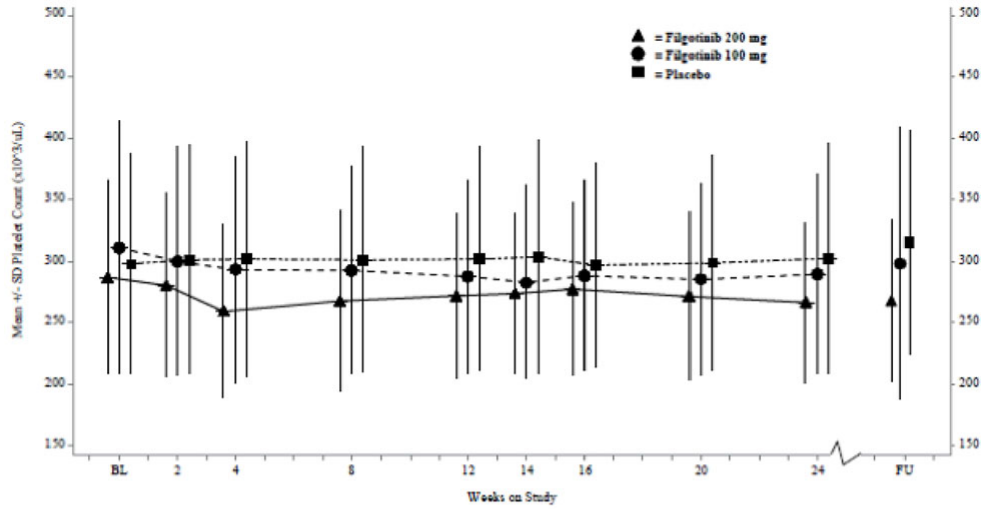
Conclusion: In this FINCH-2 subgroup analysis, most patients with normal hemoglobin, platelet, lymphocyte and neutrophil levels at baseline maintained them over 24 weeks of FIL treatment. Of the patients with mild-moderately low hemoglobin at baseline, >9% shifted towards hemoglobin normalization. Similar patterns of improvement from baseline were observed for platelet, lymphocyte and neutrophil counts. These results suggest that FIL does not increase the incidence of anemia, thrombocytopenia or leukopenia in patients who entered the study with active RA despite prior biologic therapies.

Figure. Mean (±SD) hemoglobin, platelet, lymphocyte and neutrophil count by study visit

A.



B.



Figure

Mean ± SD hemoglobin. platelet, lymphocyte and neutrophil count by study visit

Table: Shift from baseline in hemoglobin, platelet, neutrophil and lymphocyte category at Weeks 12 and 24

Hemoglobin							
Baseline level	**Normal***			**Mild-Moderate†**			**Severe**
Treatment arm	**PBO N=101**	**FIL 100 mg N=117**	**FIL 200 mg N=101**	**PBO N=47**	**FIL 100 mg N=36**	**FIL 200 mg N=46**	**n/a**
Week 12, n/N# (%)							
Normal*	83/129 (64.3)	99/138 (71.7)	84/136 (61.8)	2/129 (1.6)	13/138 (9.4)	14/136 (10.3)	-
Mild‡	6/129 (4.7)	6/138 (4.3)	7/136 (5.1)	34/129 (26.4)	19/138 (13.8)	29/136 (21.3)	-
Moderate§	0	0	0	3/129 (2.3)	1/138 (0.7)	2/136 (1.5)	-
Severe¶	0	0	0	1/129 (0.8)	0	0	-
Missing	12	12	10	7	3	1	-
Week 24, n/N# (%)							
Normal*	54/92 (58.7)	82/116 (70.7)	73/122 (59.8)	7/92 (7.6)	11/116 (9.5)	16/122 (13.1)	-
Mild‡	9/92 (9.8)	7/116 (6.0)	10/122 (8.2)	18/92 (19.6)	13/116 (11.2)	21/122 (17.2)	-
Moderate§	0	0	0	4/92 (4.3)	2/116 (1.7)	2/122 (1.6)	-
Severe¶	0	0	0	0	1/116 (0.9)	0	-
Missing	38	28	18	18	9	7	-
Platelet							
Baseline level	**Normal***			**Mild-Moderate†**			**Severe**
Treatment arm	**PBO N=146**	**FIL 100 mg N=152**	**FIL 200 mg N=145**	**PBO N=1**	**FIL 100 mg N=1**	**FIL 200 mg N=2**	**n/a**
Week 12, n/N# (%)							
Normal*	125/128 (97.7)	138/138 (100)	134/136 (98.5)	1/128 (0.8)	0	2/136 (1.5)	-
Mild‡	2/128 (1.6)	0	0	0	0	0	-
Moderate§	0	0	0	0	0	0	-
Severe¶	0	0	0	0	0	0	-
Missing	19	14	11	0	1	0	-
Week 24, n/N# (%)							
Normal*	90/91 (98.9)	114/114 (100)	118/121 (97.5)	1/91 (1.1)	0	2/121 (1.7)	-
Mild‡	0	0	1/121 (0.8)	0	0	0	-
Moderate§	0	0	0	0	0	0	-
Severe¶	0	0	0	0	0	0	-
Missing	56	38	26	0	1	0	-
Neutrophil							
Baseline level	**Normal***			**Mild-Moderate†**			**Severe**

Table new

Shift from baseline in hemoglobin, platelet, neutrophil and lymphocyte category at Weeks 12 and 24

Disclosure: M. Genovese, AbbVie, 2, 5, Abbvie, 2, 5, AbbVie, Inc., 9, Astellas, 2, 5, Eli Lilly, 2, 5, Eli Lilly and Company, 2, 5, EMD Merck Serono, 2, 5, Galapagos, 2, 5, Galapagos NV, 2, 5, 9, Genentech/Roche, 2, 5, Gilead, 2, 5, Gilead Science, 9, Gilead Sciences, Inc., 2, 5, 9, GSK, 5, Lilly, 2, 5, 9, Novartis, 2, 5, Pfizer, 2, 5, 9, Pfizer Inc, 2, 5, Pfizer, Inc., 9, Pzier, 9, RPharm, 5, Sanofi Genzyme, 2, 5, Vertex, 2, 5; **K. Kalunian**, AbbVie, 9, Abbvie, 5, Amgen, 5, AstraZeneca, 5, Biogen, 5, 9, BMS, 2, 9, Chemocentryx, 5, Eli Lilly, 5, 9, Equillium, 5, Exagen, 2, Genentech/Roche, 5, Gilead, 9, Gilead Sciences, Inc., 9, GSK, 5, Idosia, 2, Janssen, 5, Kirin, 2, MedImmune, 5, Nektar, 5, Pfizer, 2, Resolve, 2, Roche, 9, Takeda, 2, UCB, 2; **J. Gottenberg**, Abbvie, 8, BMS, 2, 5, Lilly, 5, 8, Pfizer, 2, 5, Roche, 8, Sanofi-Genzyme, 5, 8, UCB, 5, 8; **B. Bartok**, Gilead Sciences, Inc., 3, 4; **Y. Tan**, Gilead Sciences, Inc., 3, 4; **Y. Guo**, Gilead Sciences, Inc., 3, 4; **C. Tasset**, Galapagos, 1, 3, Galapagos NV, 3, 4; **J. Sundy**, Gilead Sciences, Inc., 3, 4; **K. de Vlam**, Celgene, 5, 8, Eli Lilly, 5, 8, Novartis, 5, 8, Pfizer, 5, 8, UCB, 5, 8; **D. Walker**, BMS, 8, Gilead Sciences, Inc., 8, Lilly, 8, Novartis, 8, Pfizer, 8; **T. Takeuchi**, AbbVie, 2, 5, 8, AbbVie GK, 2, 9, Asahi Kasei, 2, Asahikasei, 2, Asahikasei Pharma Corp., 2, Astellas, 2, 8, 9, Astellas Pharma Inc, 2, Astellas Pharma, Inc., 2, 5, 8, 9, Astra Zeneca, 2, AstraZeneca, 8, AYUMI, 2, 9, AYUMI Pharmaceutical Corporation, 2, BMS, 2, 8, Boehringer-ingelheim, 9, Bristol–Myers K.K., 9, Bristol-Myers, 2, Bristol-Myers Squibb, 8, Chugai, 2, 8, 9, Chugai Pharmaceutical Co, Ltd., 2, Daiichi Sankyo, 2, 8, 9, Daiichi Sankyo Co., Ltd., 2, Eisai, 2, 5, 8, 9, Eisai Co., Ltd., 2, Eli Lilly, 2, 8, Eli Lilly Japan, 9, Gilead Sciences, Inc., 9, GlaxoSmithKline K.K, 9, GSK, 8, Janssen, 2, 8, Janssen Pharmaceutical K.K, 9, Mitsubishi Tanabe, 2, 9, Mitsubishi Tanabe Pharma Co., 2, Mitsubishi-Tanabe Pharma Corp, 2, 8, 9, Nippon Kayaku, 2, Nipponkayaku, 2, 9, Nipponkayaku Co.Ltd., 2, Novartis, 2, 8, Novartis Pharma K.K, 2, 9, Novartis Pharma K.K., 2, Pfizer, 2, 8, Pfizer Japan, 2, 9, Pfizer Japan Inc., 2, Sanofi, 8, Sanofi K.K, 9, Shionogi & Co., 2, Shionogi & Co., LTD., 2, Taiho, 2, 8, 9, Taisho, 9, Taisho Toyama, 2, 8, Takahashi Industrial and Economic Research Foundation, 2, Takeda, 2, 8, Takeda Pharmaceutical Co., Ltd., 2, Teijin, 2, 8, UCB, 8, 9, UCB Japan, 9.

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